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TECHNIQUES OF MANPOWER ASSESSMENT

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by

Charles W. Bunker

INTRODUCTION

The accelerated growth of the national economies in under-developed countries constitute the basic objective of government policy as a strategic means of attaining higher standards of living and adequate distribution of the national income for their peoples.

Consequently, most of these governments are engaged, to a greater or lesser degree, in formulating an economic policy whose rational function is the drawing up of development plans.

Economic development planners whose direct aim is to draw up plans for accelerated economic growth must of necessity analyse the economic and social factors involved. Early examination of the problems involved would probably establish that among the economic pre-conditions for accelerated growth are:-

(a) the existence of a certain rate of savings in order to increase capital;

(b) the increase of factors of production, for example, utilisation of idle manpower, the raising of productivity and the rate of training, increased mechanisation;

(c) planning in the sense of setting goals, of economic development, and the creation of receptivity to change; and

(d) disciplining and increasing command by government to influence the economy.

It will be seen that a number of important problems related to the utilisation of human resources must be examined as an essential element in any national economic development plan. This is generally referred to as Manpower Planning. The basic problem of harnessing human resources consists generally of two important aspects:-

(a) the efficient utilisation of labour with a view to maximising the national output and

(b) the elimination of waste in the form of unemployment and under-employment.

PRACTICAL APPROACH

It is not the intention of this paper to enter into a discussion of the merits of orthodox economic theory versus the sociological-psychological approach to the utilisation of human resources but to indicate some practical methods by which machinery can be created to assist manpower planners to obtain basic information on the existing manpower utilisation and thereafter, regular employment situation reports.

Most modernising countries find themselves entering into the developing phase without the necessary institutions for assessing the existing utilisation of their human resources. Some have accepted the advice of international economists who advocate what has been described as impressionistic manpower forecasting. Such forecasting may well meet the situation in some countries but may be highly misleading in others. The only reliable method appears to be pragmatic.

This consists of continuous periodical surveys, the analysis of which, should provide information for adjustment in the implementation of development schemes. The extrapolation based on past and present experience should provide a reliable method of forecasting manpower requirements. It may be argued that the demand for certain skilled personnel like doctors, teachers etc. would prove the exceptions, but it is certain that in the long run the estimation of the demand for these can also be based on trends.

MANPOWER BOARDS

It is clear that modernising countries must set up a central manpower planning body. Since manpower problems are the concern of many ministries, the programme of human resources development should be implemented by an inter-ministerial board. In addition to members of the government, this board should normally have representation from the non-government employing institutions and organised labour. The Economic Development Ministry should, of course, co-ordinate the work of all ministries involved with the labour force as a whole and these would most certainly include the Ministries of Agriculture, Labour, Education, Commerce & Industry.

This co-ordination, in view of its importance, must be conducted at the highest possible level. It should take the form of a Manpower Board consisting of the ministers responsible for the departments concerned together with the central economic ministry and reporting direct to the Prime Minister. In Federated States it is important to integrate regional ministries where they have autonomous authority in any of the functions particularly in those of agriculture and education.

The purpose of the Board should be to make the assessment of human resources through periodical manpower analysis and to integrate the results within the overall development plans. The Board should deal with co-ordinating the education expansion with the needs of the industrial and commercial departments, expansion of the civil service, utilisation of external aid in the projected development plans.

It is essential that the Board should be served by a manpower Secretariat set up within the central economic ministry. If high-level personnel are not available in the country concerned external aid should be sought to man the key positions in the Secretariat. Experts should be sought to give advice on such varied subjects such as manpower projection, supply and demand, employment opportunities and for dealing with social problems connected with high capital intensity versus labour intensity.

MANPOWER SECRETARIATS

The importance of a Manpower Secretariat in integrating the work of sub-committees such as that on professional and technical education and even of primary education is evident if full utilisation of the human resources is to be realised. The importance also of agriculture to the majority of developing or modernising countries must not be overlooked. Indeed the human resources to be deployed in the agricultural sphere is of paramount importance and the development of agriculture must play a predominant role in the majority of manpower development plans. As has already been said the personnel for the Manpower Secretariat must be of the highest calibre and must serve the Board by producing co-ordinated plans for manpower development. It must carry out regular manpower surveys; maintain professional manpower registers; indicate the shortage of strategic skills, forecast the availability of specialist workers for new enterprises; indicate, where the need arises, for accelerated or emergency training schemes and where possible dictate educational needs compatible with financial ability to meet them.

POST-ENUMERATION SURVEYS

In many of the developing territories basic labour force data is either non-existent or sketchy and in the absence of basic census data on economic activity some form of sample surveys would need to be undertaken early to gauge the existing employment situation. It is not always possible to obtain the necessary statistics from a national census nor even is it desirable as it further complicates the enumerator's task in what is basically a demographic exercise. Basic information on the labour force may, however, be obtained by utilising a percentage of the already trained enumeration staff to carry out what may be called a Post-Enumeration Survey into economic activity immediately, or as soon as possible, after the census.

A suggested way of organising such a post-enumeration survey on a sample basis would be to select a number of persons at random within each supervision area into which census districts are usually divided. The number of persons selected would, of course, have to be decided in accordance with normal sampling principles, but it is recommended that the sample selected should be approximately twice as large in urban areas as in rural areas to ensure that the sample was well stratified. The use of sampling has the advantage that since a smaller number of people have to be interviewed more time can be devoted to each interview and the most highly qualified enumerators or perhaps only the supervisors need be employed to carry out the survey.

EMPLOYMENT MARKET INFORMATION PROGRAMMES

Post-Enumeration Surveys, conducted decennially, can be augmented during the intervening periods through the medium of an Employment Market Information Programme which should be developed, preferably by the Ministry of Labour. The programme is directed towards obtaining information from existing employing establishments on the current level of employment and through the use of carefully designed questionnaires an evaluation of short-term projection of future requirements in the salary and wage-earning sphere. Such a programme could consist of either taking a complete count by way of circulating a questionnaire to all employers on a master register or by a sampling method conducted every six months. Government establishments can be ignored except in so far as it is necessary to enquire what posts listed in the Annual Estimates are vacant at the time of the enquiry.

The Ministry of Labour is probably best qualified generally to handle these enquiries if it is well represented throughout the territory. It requires the establishment of an Employment Market Information Unit within the Ministry which would act as an agent of the Manpower Secretariat.

Enquiries conducted by post have a serious disadvantage arising from illiteracy. In nearly every modernising country this is a major difficulty whatever the language employed in the questionnaires. It is thus necessary to have a field organisation to follow up and assist employers to complete the questionnaires and arrange a system for checking off receipts of completed questionnaires. A simple way of doing this is for the Unit to send copies of the master list of all employers in their areas to district Labour Officers. The employers concerned are requested to forward completed questionnaires to that officer. The Labour Officer is then required to check off on his list returns as received and to visit such employers who have not replied by a given date and for him to offer assistance in completing the form.

The questionnaires should be designed so as to obtain information on the following matters: total

number of employed indicating the number separately of non-indigenous workers; separate data on the employment of women; what vacancies exist; information on the difficulties experienced in filling these vacancies; shortage of skills; whether the employer is making any attempts by apprenticeships or in-service training to bridge this gap. The questionnaire also should ask employers for a projection as to the level of employment in the undertaking six months ahead. Questions are also asked regarding the ability of the establishment to expand and, if expansion is desired, why it cannot be proceeded with. For instance, there may well be difficulties in communications, utility services, shortages of raw materials, in effects of financial regulations - export and import tariffs etc.; information is also sought on distribution difficulties and level of demand for the employers' products. In examining the vacancies notified by government departments difficulties in the recruitment of staff through shortage of skills is noted. Employment Service statistics are, of course, incorporated into the Employment Market Information Report.

THE AGRICULTURAL AND ENTREPRENEURAL SECTORS

Master lists of employers in a number of countries, particularly in Africa, are usually incomplete in two major sectors and special arrangements must be put in hand to deal with these. The first concerns small entrepreneural undertakings which are not normally visited by the Labour Inspectorate due to the inadequacy of staff to cover this field. This is an important omission. In one country in Africa it has been estimated that employment figures for these small undertakings equal, if not exceed, that calculated representing the salary and wage-earning labour force employed in undertakings employing ten or more workers.

The second concerns the agricultural field. In the smaller countries with a well developed plantation industry, agricultural undertakings can be incorporated in the Employment Market Enquiry in the way described but in a number of modernising countries, again particularly in Africa, agriculture takes the form either of small-holdings or subsistence farming. Little or nothing is generally known of the employment situation or potential in this enormous field.

Basic employment information can, of course, be obtained by the Post-Enumeration Survey on these sectors but the regular periodical follow-up required a different technique. The supervising agency conducting the periodical enquiries can still be the Employment Market Information Unit of the Ministry of Labour and a modified type of questionnaire can be employed. It is important to assess in agriculture the extent of family employment, crop sharing reward systems, seasonal employment and normal full-time wage-earning employment.

It is also necessary to obtain information on tenancy conditions, communial ownership systems and other factors which may have a bearing on the potential utilisation of the labour force.

A suggested method of organisation for conducting the necessary enquiries is through the employment of part-time officials, preferably school teachers during school vacations, appointed on a 'permanent' basis as a correspondent for a given area such as a province or other geographical or political division in the case of agriculture, or for a political ward or other suitable division in a town or city. These areas or divisions could be divided into three sections to be visited by the correspondent in turn each school vacation. Thus in the year each of the farms or small undertakings can be visited. Every second six-monthly Employment Market Information Report should therefore contain data on the employment situation in these sectors. It is suggested that the correspondents' work would be supervised by the district labour officer but some countries may well wish to organise the operation in so far as agriculture is concerned through the Ministry of Agriculture or even the Provincial or District Administration.

OCCUPATIONAL CLASSIFICATIONS

The importance of a National Classification of Occupations to modernising countries cannot be too highly stressed. For a post-enumeration survey an occupational coding system must be available or one devised as a matter of urgency. This can take the form of merely identifying the occupations followed in the country concerned and arranging them into a coding index by 3-digit unit groups. If no National Classification of Occupations has been devised a recourse to the *International Standard Classification of Occupations at Unit Group level would provide a useful guide.

A National Classification of Occupations must, however, be devised giving a detailed statement of the work performed and materials and tools used by persons following the occupations listed in an expanded 5-digit Classification. This is an essential element in a successful Employment Market Information Programme. The advantage in making available a National Classification of Occupations to the employment service is obvious.

STATISTICAL COMMITTEES

The importance of a Standing Committee on Statistics cannot be over-emphasised. Many departments of government institute statistical enquiries and it is not uncommon for questionnaires bearing requests for similar information being issued simultaneously or within a short period. It is essential therefore that a National Standing Committee should be set up,

*International Labour Office, Geneva, 1958.

preferably under the aegis of the Central Economic Planning Ministry, to co-ordinate statistical enquiries. For example, Ministries of Economic Development or Commerce and Industry may well have information on the projected establishment of new industries or the expansion of the existing industries which is not available to, for instance, Ministries of Labour engaged in making Employment Market Surveys and the Ministries of Education may well possess information on the general education picture which needs to be co-ordinated with manpower projections. All this information must find its way to the Manpower Secretariat where an up-to-date picture of the current utilisation of manpower is available and projections can be made for the future.

It is advisable, if for some reason a Standing Committee on Statistics is not established, to ensure that no major statistical enquiry is undertaken by any ministry without the approval of the central planning authority, and that any enquiry touching the human resources field should be initiated only by the Manpower Secretariat.

CONCLUSION

Techniques of manpower assessment will vary according to many factors among which are problems of communications, sizes of countries, and to a lesser extent sizes of population but as has been suggested above modernising countries following systems based on continuous periodical surveys will best serve the central economic authority in their duty to provide for their peoples a pre-determined minimum standard of well-being which is the basic objective of manpower planning.

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